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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,570	07/30/2003	Atsushi Nishio	02410338AA	6464

30743 7590 02/04/2005

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EXAMINER
HAMMOND, BRIGGITTE R

ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H·A

Office Action Summary	Application No.	Applicant(s)	
	10/629,570	NISHIO ET AL.	
	Examiner	Art Unit	
	Briggitte R. Hammond	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *07 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No._____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first opening having a same shape and dimension as the second opening and the chamber being shaped as a columnar through hole penetrating from the first opening to the second opening must be shown or the feature(s) canceled from the claim, i.e. a drawing without the plate/bottom should be provided. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 10 is objected to because of the following informalities: in line 3, change "where" to - -when- -. Appropriate correction is required.

Claim Rejections - 35 USC § 103

Claims 1,2, 5-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozel et al. 4,934,944. Kozel et al. disclose a connection structure comprising: a connector 12, having an inner side face defining a chamber formed with an opening in which a module body 20 is inserted and having an outer side face opposed to the inner side face; the module body 20, inserted from the opening to be accommodated in the chamber; a first conductive member 26, provided on an outer periphery of the module body 20 which is opposed to the inner side face of the connector in a case where the module body is accommodated in the chamber; and a second conductive member 22, fully located within said connector and provided on the inner side face of the connector, such that the first conductive member is brought into contact with the second conductive member in a case where the module body is plenarily accommodated in the chamber, and wherein the second conductive member 22 is extended from the inner side face so as to be connected to an external line. Kozel et al. do not disclose the second conductive member extending to the outer side face so as to be connected to an external line at the outer side face. However, it would have been obvious to one having ordinary skill in the art to modify the connection structure of Kozel et al. to include the second conductive member extending to the outer side face instead of from the inner face, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 2, wherein the second conductive member 22 is extended in a direction parallel to an inserting direction of the module body.

Regarding claim 5, wherein an end of the chamber opposite to the opening is made open (see fig. 1).

Regarding claim 6, wherein at least a pair 26,26 of the second conductive member 22 is arranged on the inner side face of the connector so as to oppose to each other.

Regarding claim 7, wherein the second conductive member 22 has elasticity.

Regarding claim 8, a plate 56 is attached to a side of the connector opposite to the opening.

Regarding claim 12, Kozel et al. discloses the invention substantially as claimed except for the shape of the second conductive member being an inverted V-shaped. However, it would have been obvious to have the conductive members with different type configurations since applicants have presented no explanation that this particular configuration of the pin is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing spring contact surfaces. A change in shape is generally recognized as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1976).

Claims 9 –11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozel et al. 4,934,944 in view of Griffin et al. 4,378,139 Kozel et al. discloses a connection structure, comprising: a connector 12, having a top face and a bottom face opposed to the top face, and having an inner side face defining a chamber

communicating a first opening formed in the top face and a second opening formed in the bottom face; a module body 20, having a top face and a bottom face opposed to the top face, adapted to be accommodated in the chamber; a first conductive member 26, provided on an outer periphery of the module body which is opposed to the inner side face of the connector in a case where the module body is accommodated in the chamber; and a second conductive member 22 provided on the inner side face of the connector, such that the first conductive member is brought into contact with the second conductive member in a case where the module body is plenarily accommodated in the chamber. Kozel et al. do not disclose the first and second openings having the same shape and dimensions nor the chamber having a columnar through hole penetrating from the first and second openings. However, Griffin et al. disclose a connector 10, having a top face and a bottom face opposed to the top face, and having an inner side face defining a chamber communicating a first opening formed in the top face and a second opening formed in the bottom face; a module body 26, having a top face and a bottom face opposed to the top face and adapted to be accommodated in a chamber. Griffin et al. also disclose the first and second openings having the same shape and dimensions and the chamber having a columnar through hole 16 penetrating from the first openings to the second opening. Therefore, it would have been obvious to one of ordinary skill to modify the connector of Kozel by providing the first and second openings having the same shape and dimensions and the chamber having a columnar through hole penetrating from the first openings to the second opening to accommodate the module body as taught by Griffin et al.

Regarding claim 10, the bottom surface of the connector is coplanar with the bottom surface of the module body in a case when the module body is plenarily accommodated in the chamber.

Regarding claim 11, Kozel et al. discloses a plate 56 attached to the bottom surface.

Regarding claim 13, Kozel et al. discloses the second conductive member being fully located within said connector.

Regarding claim 14, Kozel et al. discloses the second conductive member being U-shaped contact pins fixedly secured to the inner side surface of the connector. Kozel et al. do not disclose the contact pins being V-shaped.

However, a change in shape would have been an obvious modification, since more than the mere change of form is necessary for patentability. Span-Deck Inc. *v.* Fab-Con, Inc. (CA, 81982) 215 USPQ 835.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kozel et al. 4,934,944 in view of Elberbaum 6,268,882. Kozel et al. discloses the invention substantially as claimed except for the module body being a camera. However, Elberbaum discloses a connection structure in fig. 9A, comprising: a connector 61, having an inner side face defining a chamber formed with an opening (not numbered), first 4b and second 4a conductive members and a camera module body 5,7 accommodated in the chamber. It would have been obvious to one of ordinary skill to modify the connector of Kozell by providing a camera (or any other electronic device) as

the module body as taught by Elberbaum for electrical connection to the connection structure/socket.

Response to Arguments

Applicant's arguments with respect to claims 1,2 and 4-11 have been considered but are moot in view of the new ground of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Howell et al. 6,328,574 was cited for a similar connection structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Briggitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Briggitte R. Hammond
Examiner
Art Unit 2833

January 27, 2005